

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/542,173 Confirmation No. : 8290
First Named Inventor : Leonardo Provvedi
Filed : March 3, 2006
TC/A.U. : 2617
Examiner : Diego D. Herrera
Docket No. : 103884.56565US
Title : TFC Selection in the Uplink

PRE-APPEAL BRIEF CONFERENCE REQUEST

Sir:

Appellant requests review of the final Office Action dated March 19, 2009.

This Request is being filed with a Notice of Appeal.

The rejection of claim 15 for obviousness in view of the combination of Murata and Shiu should be withdrawn because the combination does not disclose or suggest all of the elements of claim 15 and the Patent Office has not established a *prima facie* case of obviousness with respect to claim 15.

I. The Combination of Murata and Shiu Does Not Disclose or Suggest All of the Elements of Claim 15

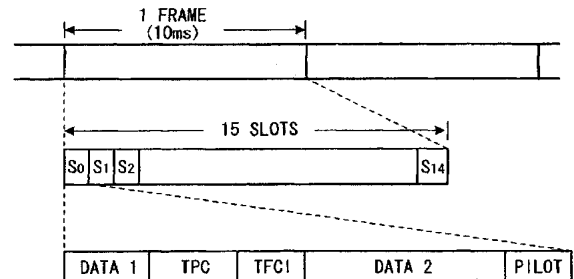
Appellant's claim 15 recites a novel and inventive method of selecting a transport format combination for use by a mobile station in which the mobile station receives from the base station:

1. a set of transport format combinations and a calculated channel quality requirement for each transport format combination of the set; and
2. an indication of existing channel quality of the channel of variable quality, wherein the indication is received by inband signaling in a user data portion of a radio packet.

The combination of Murata and Shiu does not disclose or suggest at least these elements of claim 15.

1. Murata and Shiu Do Not Disclose or Suggest Receiving a Set of Transport Format Combinations (TFCs) and Calculated Channel Quality Requirement for Each TFC of the Set

Murata discloses a method for a mobile terminal to select a TFC based upon a designated maximum power value and the measured transmission power value.¹ As illustrated in FIG. 16 of Murata (reproduced on the right), Murata discloses that prior systems involved a base station transmitting a transmission power control bit (TPC), TFC indicator (TFCI), data and a pilot.



A **single** TFCI is not a **set of** TFCs. Accordingly, Murata does not disclose or suggest that the mobile terminal receives “a set of transport format combinations and a calculated channel quality requirement for each transport format combination of the set” as required by claim 15.

a. The Power Values of Murata Are Not a Set of TFCs or a Calculated Channel Quality Requirement for each TFC of the Set

To reject a similar element recited in Appellant’s claim 1², the Patent Office cites column 19, lines 34-43 as disclosing “the base station judges and sends requirements and adjustments to be made to mobile terminal which then complies”.³ Claim 15 does not merely recite that the base station “sends requirements”, but instead specifically recites that the mobile station receives:

1. a set of transport format combinations; and
2. a calculated channel quality requirement for each transport format combination of the set.

Thus, a general disclosure that a base station “sends requirements” does not disclose or suggest the specific elements of claim 15.

¹ Abstract.

² As discussed below, despite the fact that claims 1 and 15 are not identical, the Patent Office has not specifically addressed how the disclosures of Murata and Shiu apply to the specific language of claim 15.

³ See, for example, page 2 of the Advisory Action.

Additionally, column 19, lines 34-43 discloses that the base station sends power values P_{MAX} or P_g to the mobile station, which “uses this value to create TFC control data and performs the TFC selection based upon the transmission power”.⁴ Power value P_{MAX} is the “designated maximum transmission power”⁵ and power value P_g is the “appropriate transmission power”.⁶ Murata does not, however, disclose or suggest that P_{MAX} or P_g are a “set of transport format combinations” or “a calculated channel quality requirement for each transport format combination of the set” as specifically required by claim 15.

2. Murata and Shiu Do Not Disclose or Suggest Receiving an Indication of Channel Quality by Inband Signaling in a User Data Portion of a Radio Packet

The final Office Action cites Shiu’s discussion of SINR or SNIR in paragraphs 0011, 0013, 0014 and 0052-0054 as disclosing the claimed “indication of existing channel quality” that is received by a mobile station. These paragraphs do not disclose or suggest that SINR or SNIR is received by the mobile station as required by claim 15. Instead, these paragraphs disclose that the **mobile terminal measuring** the received SNIR:

- If the received signal quality **as measured** by the received signal-to-noise-plus-interference ratio (SNIR) **at the terminal** is too poor⁷;
- The inner loop adjustment for a particular data transmission is typically achieved by (1) **measuring the signal quality of the data transmission at the terminal**⁸

Thus, contrary to the statements in the Office Action Shiu discloses measuring signal quality **at the terminal**, and not that an indication of signal quality is received by the mobile station as required by Appellant’s claim 15. Accordingly, there is no disclosure or suggestion in Shiu that such indications

⁴ Column 19, lines 51-53.

⁵ Column 16, lines 16-17.

⁶ Column 17, lines 42-43.

⁷ Paragraph 0052. (Emphasis added).

⁸ Paragraph 0055. (Emphasis added).

are “received by inband signaling in a user data portion of a radio packet” as also required by claim 15.

Likely recognizing this deficiency of Shiu, the Advisory Action no longer relies upon Shiu for the disclosure of this element⁹, but instead now cites column 8, lines 25-45 of Murata as “teaching channel quality”.¹⁰ The cited section of Murata discloses that

a base station measures the channel quality of uplink data..., determines whether a target channel quality has been attained and, on the basis of the determination, instructs the mobile station to raise or lower the transmission power of the uplink slot by slot by a TPC bit.

The TPC bit is included in a field reserved for this bit. Murata does not disclose or suggest that the TPC bit is “received by inband signaling in a user data portion of a radio packet” as required by claim 15.

Because the combination of Murata and Shiu does not disclose or suggest all of the elements of claim 15, the combination does not render this claim obvious

II. The Patent Office Has Not Established a *Prima Facie* Case of Obviousness with Respect to Claim 15

It is well established that the “examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness...[by making] a determination whether the claimed invention ‘as a whole’ would have been obvious”¹¹ to the person of ordinary skilled in the art at the time of the invention.

First, it is noted that the rejection of claim 15 groups this claim together with claim 1 and only addresses the elements of claim 1. Claims 1 and 15, however, are not identical. For example, claim 1 recites “indicating the transport format combinations and channel quality requirements”, whereas claim 15

⁹ Because the final Office Action appears to cite Shiu only for the disclosure of channel quality indications, it is not clear why Shiu is still cited to reject claim 15.

¹⁰ Advisory Action at page 2.

¹¹ M.P.E.P. § 2142.

recites “receiving...a set of transport format combinations and a calculated channel quality requirement for each transport format combination of the set”. By failing to specifically address the elements of claim 15 that are different from those of claim 1, the Patent Office has not demonstrated that it has considered claim 15 “as a whole”.

Second, as discussed above, the Advisory Action makes clear that the Patent Office now relies upon Murata for the disclosure of all elements of claim 15. The rejection of claim 15 provides motivation for modifying Murata by Shiu. The rejection does not provide any motivation for modifying some disclosures contained in Murata by other disclosures contained in Murata. Furthermore, it is not clear why Shiu is still included in the rejection when the Patent Office apparently is no longer relying upon a disclosure of Shiu to reject claim 15. Thus, the Patent Office has not presented sufficient evidence as to why the combination of Murata and Shiu renders claim 15 obvious when Shiu is not being relied upon to reject this claim.

III. Conclusion

Because the combination of Murata and Shiu does not disclose or suggest all of the elements of claim 15 and the Patent Office, by failing to address the specific elements of this claim and including a reference that is not being relied upon in the rejection, has not established a *prima facie* case of obviousness to reject claim 15.

Respectfully submitted,

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